

Find  $(f^{-1})'(a)$ .

$$f(x) = 4x^3 + 3x^2 + 6x + 4, \quad a = 4$$

$$(f^{-1})'(4) = \frac{1}{f'(f^{-1}(4))} = \frac{1}{12(0)^2 + 6(0) + 6} = \frac{1}{6}$$

$$f' = 12x^2 + 6x + 6$$

$$f^{-1}(4) : 4x^3 + 3x^2 + 6x + 4 = 4$$

$x=0$  works